

Results of Directional Survey

API number:	30-025-41644		
OGRID:		Operator:	CIMAREX ENERGY CO.
		Property:	LYNCH 35 FEDERAL COM # 3H

surface	ULSTR:	N	35	T	20S	R	34E
				350	FSL	2580	FWL

BH Loc	ULSTR:	C	35	T	20S	R	34E
15851	MD	11317.6	TVD	355	FNL	2013	FWL
				4925	FSL		

Top Perf/OH	ULSTR:	N	35	T	20S	R	34E
11450	MD	11327.6	TVD	545	FSL	2036	FWL

Bot Perf/OH	ULSTR:	C	35	T	20S	R	34E
15800	MD	11318.6	TVD	405	FNL	2018	FWL
				4875	FSL		

	MD	N/S	E/W	VD
	11443	188.80	-544.47	11323.84
TOP PERFS/OH	11450	194.70	-544.29	11327.59
	11475	215.79	-543.64	11341.00
	15781	4505.62	-559.80	11318.96
BOT PERFS/OH	15800	4524.53	-561.66	11318.60
	15851	4575.27	-566.66	11317.62

NEXT TO LAST	15781	4505.62	-559.80	11318.96
LAST READING	15851	4575.27	-566.66	11317.62
TD	15851	4575.27	-566.66	11317.62

Surface Location	350	FS	2580	FW
Projected BHL	4925	FS	2013	FW
Location of				
Top Perfs/OH	545	FS	2036	FW
Bottom Perfs/OH	4875	FS	2018	FW

SUMMARY of Subsurface Locations

Surface Location	N-35-20S-34E	350	FS	2580	FW	Vert. Depth
Top Perfs/OH	N-35-20S-34E	545	FS	2036	FW	11327.59
Bottom Perfs/OH	C-35-20S-34E	4875	FS	2018	FW	11318.60
Projected TD	C-35-20S-34E	4925	FS	2013	FW	11317.62

06.16.2014

Reservoir Development
Drilling & Measurements
4301 SW 44th St
Oklahoma City, Oklahoma 73119 USA
Phone: (405) 682-2284
Fax: (405) 682-3937



HOBBS OCD

September 4, 2014

SEP 30 2014

Cimarex
600 N MARIENFELD STREET SUITE 600
MIDLAND, TX 79701

RECEIVED

Re:

S35-T20S-R34E Lea. NM
N 32.52331 W 103.53114

CLIENT: Cimarex Energy Co.
WELL: Lynch 35 Fed Com 3H
FIELD: Wildcat; Bonespring
RIG: Noram 26
COUNTY: Lea
API NO: 30-025-41644
JOB NO: 14MLD0278

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jacob Collinsworth MWD	Lynch 35 Fed Com 3H Original Hole	10933.00 Ft to 15781.00 Ft	May 18, 2014 to May 27, 2014	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Joseph Hogan
Field Service Manager

Reservoir Development
Drilling & Measurements
4301 SW 44th St
Oklahoma City, Oklahoma 73119 USA
Phone: (405) 682-2284
Fax: (405) 682-3937



Well Reference:
S35-T20S-R34E Lea, NM
N 32.52331 W 103.53114

I, Jacob Collinsworth certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of May 18, 2014 through May 27, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 10933.00 feet to a depth of 15781.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Cimarex Energy Co. for the Lynch 35 Fed Com 3H Well (Original Hole) API No. 30-025-41644 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

SIGNED ON BEHALF OF JACOB COLLINSWORTH BY JOE HOGAN.

By
Jacob Collinsworth
MWD

Subscribed and Sworn to before me this 9th day of September (month) 2014 (yr)

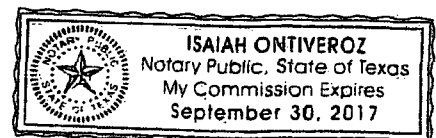
My Commission expires:

9/30/17

Isaiah Ontiveroz
Notary Public

(signature)

Ector, Texas
(County State)



SCHLUMBERGER
Survey Report

28-Aug-2014

Client..... Cimarex Energy Co.
Field..... Wildcat Bone Spring

Well..... Lynch 35 Fed Com 3H
API number..... 30-025-41644
Engineer..... J. Collinsworth

Spud date..... 28-Apr-14
Last survey date..... 27-May-14
Total accepted surveys..... 72
MD of first survey..... 10933.00 ft
MD of last survey..... 15781.00 ft

County..... Lea
State..... New Mexico
Rig..... Noram 26

Latitude..... 32° 31' 23.89" N
Longitude..... 103° 31' 52.09" W

----- Survey calculation methods -----
Method for positions..... Minimum curvature
Method for DLS..... Lubinski

----- Depth reference -----
Permanent datum..... MSL
Depth reference..... Driller's Depth
GL above permanent..... 3803.00
KB above permanent..... 3828.00
DF above permanent..... 3828.00

----- Vertical section origin -----
Latitude (+N/-)..... 0.00 ft
Departure (+E/-)..... 0.00 ft

----- Grid Coordinates -----
NAD27 Texas State Plane, Central Zone, US Feet
X..... 788589.90 ft
Y..... 555038.90 ft

Azimuth from Vsect Origin to target: 353.02 degrees

----- MWD Survey Reference Criteria -----

-----Run1----- Calculation Date: 19-May-2014
Location G..... 998.94325 mgn Tolerance G..... 2.50 mgn
Location B..... 48484.06 nT Tolerance B..... 300.00 nT
Magnetic Dip: 60.3848 degrees Tolerance Dip: 0.45 degrees

-----Run2----- Calculation Date: 24-May-2014
Location G..... 998.94325 mgn Tolerance G..... 2.50 mgn
Location B..... 48482.46 nT Tolerance B..... 300.00 nT
Magnetic Dip: 60.3844 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2013

-----Run1-----
Magnetic dec (+E/-)..... 7.3439 degrees
Grid Conv (+E/-)..... 0.4339 degrees
Total Azim Corr (+E/-)..... 6.91 degrees

-----Run2-----
Magnetic dec (+E/-)..... 7.3424 degrees
Grid Conv (+E/-)..... 0.4324 degrees
Total Azim Corr (+E/-)..... 6.91 degrees

----- Survey Correction Index Description -----

0 = Uncorrected 1 = Sag Corrected
2 = DMAG Corrected 3 = Sag + DMAG Corrected

===== Survey List =====													
Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/-S (ft)	E/-W (ft)	Closure (ft)	at Azi (deg)	DLS (deg/100ft)	Tool	Correction
1	0.00	0.00	0.00	-999.25	0.00	0.00	0.00	0.00	0	90.00	0.00	TIP	0
2	25.00	0.16	206.46	25.00	25.00	-0.03	-0.03	-0.02	0.03	206.46	0.64	SingleShot	0
3	88.40	0.57	206.46	63.40	88.40	-0.37	-0.39	-0.20	0.44	206.46	0.65	SingleShot	0
4	178.50	0.80	210.19	90.10	178.49	-1.24	-1.34	-0.71	1.52	208.01	0.26	SingleShot	0
5	273.10	0.84	207.92	94.60	273.08	-2.34	-2.52	-1.37	2.87	208.49	0.05	SingleShot	0
6	361.40	0.68	211.63	88.30	361.37	-3.28	-3.54	-1.95	4.04	208.80	0.19	SingleShot	0
7	451.90	0.71	211.84	90.50	451.87	-4.13	-4.47	-2.52	5.14	209.43	0.03	SingleShot	0
8	541.80	0.61	207.31	89.90	541.76	-4.96	-5.37	-3.04	6.17	209.48	0.13	SingleShot	0
9	632.80	0.59	221.42	91.00	632.76	-5.67	-6.15	-3.57	7.11	210.12	0.16	SingleShot	0
10	723.20	0.53	216.76	90.40	723.15	-6.28	-6.84	-4.13	7.99	211.12	0.08	SingleShot	0
11	816.90	0.45	234.01	93.70	816.85	-6.78	-7.40	-4.68	8.76	212.33	0.18	SingleShot	0
12	909.30	0.25	227.39	92.40	909.25	-7.07	-7.75	-5.13	9.29	213.48	0.22	SingleShot	0
13	1000.70	0.23	226.28	91.40	1000.65	-7.30	-8.01	-5.41	9.67	214.01	0.02	SingleShot	0
14	1090.90	0.01	299.00	90.20	1090.85	-7.40	-8.13	-5.54	9.84	214.28	0.25	SingleShot	0
15	1183.30	0.06	328.39	92.40	1183.25	-7.35	-8.09	-5.58	9.82	214.58	0.06	SingleShot	0

16	1277.60	0.07	239.52	94.30	1277.55	-7.33	-8.08	-5.65	9.86	214.99	0.10	SingleShot	0
17	1371.90	0.10	135.25	94.30	1371.85	-7.42	-8.16	-5.64	9.92	214.66	0.14	SingleShot	0
18	1466.50	0.20	159.48	94.60	1466.45	-7.64	-8.38	-5.53	10.04	213.42	0.12	SingleShot	0
19	1560.60	0.34	186.34	94.10	1560.55	-8.07	-8.81	-5.50	10.38	211.98	0.20	SingleShot	0
20	1655.00	0.44	208.05	94.40	1654.94	-8.64	-9.41	-5.70	11	211.22	0.19	SingleShot	0
21	1749.60	0.49	211.34	94.60	1749.54	-9.26	-10.07	-6.08	11.77	211.13	0.06	SingleShot	0
22	1844.00	0.43	213.67	94.40	1843.94	-9.84	-10.71	-6.49	12.52	211.21	0.07	SingleShot	0
23	1938.40	0.43	202.24	94.40	1938.33	-10.42	-11.33	-6.82	13.23	211.04	0.09	SingleShot	0
24	2032.90	0.40	200.84	94.50	2032.83	-11.02	-11.97	-7.07	13.9	210.57	0.03	SingleShot	0
25	2127.40	0.40	198.67	94.50	2127.33	-11.61	-12.59	-7.29	14.55	210.08	0.02	SingleShot	0
26	2222.00	0.50	192.26	94.60	2221.93	-12.30	-13.31	-7.49	15.27	209.36	0.12	SingleShot	0
27	2316.50	0.42	191.25	94.50	2316.42	-13.02	-14.05	-7.64	15.99	208.54	0.09	SingleShot	0
28	2410.80	0.37	191.19	94.30	2410.72	-13.63	-14.69	-7.77	16.62	207.88	0.05	SingleShot	0
29	2505.00	0.42	180.90	94.30	2505.02	-14.27	-15.33	-7.83	17.22	207.06	0.09	SingleShot	0
30	2599.40	0.38	177.80	94.30	2599.32	-14.92	-15.99	-7.83	17.8	206.08	0.05	SingleShot	0
31	2693.50	0.36	170.96	94.10	2693.41	-15.53	-16.59	-7.77	18.32	205.09	0.05	SingleShot	0
32	2787.80	0.25	153.49	94.30	2787.71	-16.02	-17.07	-7.63	18.7	204.08	0.15	SingleShot	0
33	2882.20	0.30	141.24	94.40	2882.11	-16.42	-17.45	-7.38	18.95	202.94	0.08	SingleShot	0
34	2976.60	0.38	124.80	94.40	2976.51	-16.84	-17.82	-6.97	19.13	201.37	0.13	SingleShot	0
35	3071.00	0.49	105.71	94.40	3070.91	-17.20	-18.11	-6.33	19.18	199.26	0.19	SingleShot	0
36	3165.40	0.61	97.24	94.40	3165.30	-17.48	-18.28	-5.44	19.07	196.57	0.15	SingleShot	0
37	3259.80	0.53	98.25	94.40	3259.70	-17.72	-18.41	-4.51	18.95	193.76	0.09	SingleShot	0
38	3354.20	0.91	90.71	94.40	3354.09	-17.94	-18.48	-3.33	18.77	190.21	0.41	SingleShot	0
39	3448.60	0.84	91.95	94.40	3448.48	-18.14	-18.51	-1.89	18.61	185.82	0.08	SingleShot	0
40	3542.80	0.85	89.77	94.20	3542.67	-18.33	-18.53	-0.50	18.54	181.54	0.04	SingleShot	0
41	3637.40	0.79	84.86	94.60	3637.26	-18.44	-18.47	0.85	18.49	177.35	0.10	SingleShot	0
42	3731.80	0.78	82.73	94.40	3731.65	-18.45	-18.33	2.14	18.45	173.34	0.03	SingleShot	0
43	3826.00	0.79	88.58	94.20	3825.84	-18.51	-18.23	3.42	18.55	169.36	0.09	SingleShot	0
44	3920.40	0.88	77.59	94.40	3920.23	-18.51	-18.06	4.78	18.68	165.17	0.19	SingleShot	0
45	4014.70	1.04	76.94	94.30	4014.52	-18.35	-17.71	6.32	18.81	160.35	0.17	SingleShot	0
46	4108.90	1.05	78.14	94.20	4108.70	-18.19	-17.34	8.00	19.1	155.23	0.03	SingleShot	0
47	4203.30	1.23	84.18	94.40	4203.08	-18.13	-17.06	9.86	19.7	149.98	0.23	SingleShot	0
48	4297.80	1.37	82.43	94.50	4297.56	-18.14	-16.81	11.99	20.64	144.51	0.15	SingleShot	0
49	4392.40	1.67	79.49	94.60	4392.13	-18.04	-14.46	14.46	21.87	138.61	0.33	SingleShot	0
50	4486.90	1.79	78.53	94.50	4486.58	-17.84	-15.86	17.26	23.44	132.58	0.13	SingleShot	0
51	4581.60	1.77	77.62	94.70	4581.24	-17.59	-15.26	20.14	25.27	127.15	0.04	SingleShot	0
52	4676.10	2.14	81.36	94.50	4675.68	-17.40	-14.68	23.31	27.55	122.20	0.41	SingleShot	0
53	4770.60	2.31	81.31	94.50	4770.11	-17.29	-14.13	26.94	30.42	117.67	0.18	SingleShot	0
54	4864.50	2.43	80.35	93.90	4863.93	-17.15	-13.51	30.77	33.6	113.70	0.13	SingleShot	0
55	4959.10	2.62	79.80	94.60	4958.44	-16.93	-12.79	34.87	37.15	110.14	0.20	SingleShot	0
56	5053.70	2.73	78.27	94.60	5052.94	-16.62	-11.95	39.21	40.99	106.95	0.14	SingleShot	0
57	5148.10	2.99	77.95	94.40	5147.22	-16.22	-10.98	43.82	45.17	104.06	0.28	SingleShot	0
58	5242.80	3.15	81.33	94.70	5241.78	-15.92	-10.07	48.81	49.83	101.66	0.26	SingleShot	0
59	5337.40	3.27	80.31	94.60	5336.23	-15.72	-9.22	54.03	54.82	99.68	0.14	SingleShot	0
60	5431.80	3.26	79.22	94.40	5430.48	-15.41	-8.27	59.32	59.9	97.93	0.07	SingleShot	0
61	5526.20	3.54	79.20	94.40	5524.72	-15.04	-7.22	64.82	65.23	96.35	0.30	SingleShot	0
62	5617.60	3.82	77.70	91.40	5615.93	-14.57	-6.04	70.57	70.83	94.89	0.32	SingleShot	0
63	5711.90	3.90	77.56	94.30	5710.01	-13.98	-4.68	76.77	76.91	93.49	0.09	SingleShot	0
64	5806.10	3.71	75.20	94.20	5804.01	-13.26	-3.21	82.85	82.91	92.22	0.26	SingleShot	0
65	5900.40	2.24	64.41	94.30	5898.18	-12.25	-1.64	87.46	87.46	91.07	1.66	SingleShot	0
66	5994.60	1.12	292.38	94.20	5992.35	-11.21	-0.49	88.27	88.27	90.32	3.29	SingleShot	0
67	6089.10	3.27	264.98	94.50	6086.78	-10.67	-0.37	84.73	84.73	90.25	2.47	SingleShot	0
68	6183.10	3.38	262.31	94.00	6180.62	-10.61	-0.98	79.31	79.32	90.71	0.20	SingleShot	0
69	6277.90	3.39	261.72	94.50	6274.96	-10.71	-1.76	73.79	73.81	91.36	0.04	SingleShot	0
70	6371.70	3.44	261.31	94.10	6368.89	-10.86	-2.58	68.24	68.29	92.17	0.06	SingleShot	0
71	6466.10	3.61	271.02	94.40	6463.11	-10.53	-2.96	62.47	62.54	92.71	0.66	SingleShot	0
72	6560.50	5.39	287.28	94.40	6557.22	-8.29	-1.59	55.27	55.29	91.65	2.30	SingleShot	0
73	6654.90	7.52	285.92	94.20	6651.02	-4.07	1.42	45.09	45.11	88.19	2.26	SingleShot	0
74	6749.10	8.29	282.62	94.20	6744.32	0.61	4.60	32.54	32.86	81.95	0.95	SingleShot	0
75	6843.60	8.65	278.52	94.50	6837.79	4.80	7.14	18.86	20.17	69.26	0.74	SingleShot	0
76	6937.90	9.40	268.87	94.30	6930.93	7.48	8.04	4.15	9.04	27.28	1.79	SingleShot	0
77	7032.50	9.01	267.61	94.60	7024.31	8.86	7.58	-10.98	13.34	304.61	0.46	SingleShot	0
78	7126.90	8.70	266.83	94.40	7117.59	9.92	6.87	-25.49	26.4	285.09	0.35	SingleShot	0
79	7221.40	8.68	266.37	94.50	7211.00	10.81	6.03	-39.75	40.2	278.62	0.08	SingleShot	0
80	7315.90	8.38	266.67	94.50	7304.46	11.67	5.18	-53.74	53.99	275.50	0.32	SingleShot	0
81	7410.30	8.74	267.56	94.40	7397.81	12.67	4.47	-67.77	67.92	273.77	0.41	SingleShot	0
82	7505.00	9.38	270.45	94.70	7491.32	14.24	4.23	-82.68	82.78	272.93	0.83	SingleShot	0
83	7599.50	8.63	270.09	94.50	7584.66	16.11	4.30	-97.47	97.56	272.52	0.80	SingleShot	0
84	7693.80	8.84	270.15	94.30	7677.86	17.88	4.33	-111.79	111.87	272.22	0.22	SingleShot	0
85	7788.20	10.20	267.92	94.40	7770.96	19.49	4.04	-127.39	127.46	271.82	1.49	SingleShot	0
86	7882.80	10.69	265.27	94.60	7864.00	20.55	3.02	-144.51	144.54	271.20	0.73	SingleShot	0
87	7977.30	10.18	267.22	94.50	7956.93	21.51	1.89	-161.58	161.6	270.67	0.66	SingleShot	0
88	8071.60	9.90	270.36	94.30	8049.79	23.16	1.53	-178.01	178.02	270.49	0.65	SingleShot	0
89	8166.00	9.58	270.11	94.40	8142.83	25.16	1.60	-193.99	193.99	270.47	0.34	SingleShot	0
90	8260.40	9.41	269.67	94.40	8235.93	27.03	1.57	-209.56	209.56	270.43	0.20	SingleShot	0
91	8354.90	9.45	268.45	94.50	8329.16	28.65	1.32	-225.04	225.04	270.34	0.22	SingleShot	0
92	8449.40	8.86	267.95	94.50	8422.45	30.01	0.85	-240.07	240.07	270.20	0.63	SingleShot	0
93	8543.90	8.72	269.25	94.50	8515.84	31.42	0.49	-254.50	254.5	270.11	0.26	SingleShot	0
94	8638.20	8.81	268.79	94.30	8609.04	32.92	0.25	-268.87	268.87	270.05	0.12	SingleShot	0
95	8732.50	8.85	267.68	94.30	8702.22	34.23	-0.20	-283.34	283.34	269.96	0.19	SingleShot	0
96	8827.00	8.51	267.80	94.50	8795.64	35.41	-0.76	-297.59	297.59	269.85	0.36	SingleShot	0
97	8921.50	8.71	267.44	94.50	8889.08	36.54	-1.35	-311.72	311.72	269.75	0.22	SingleShot	0
98	9015.80	7.62	269.84	94.30	8982.42	37.83	-1.69	-325.11	325.11	269.70	1.21	SingleShot	0
99	9110.10	6.92	272.43	94.30	9075.96	39.51	-1.46	-337.04	337.04	269.75	0.82	SingleShot	0
100	9204.50	8.49	272.04	94.40	9169.51	41.53	-0.97	-349.68	349.68	269.84	1.66	SingleShot	0
101	9298.90	8.73	268.43	94.40	9262.84	43.30	-0.92	-363.81	363.81	269.85	0.63	SingleShot	0
102	9393.30	9.45	266.82	94.40	9356.06	44.48	-1.55	-378.71	378.71	269.77	0.81	SingleShot	0
103	9487.60	10.39	264.78	94.30	9448.95	45.26	-2.75	-394.90	394.91	269.60	1.06	SingleShot	0

104	9582.00	9.19	267.14	94.40	9541.97	46.06	-3.90	-410.91	410.93	269.46	1.34	SingleShot	0
105	9676.00	8.41	269.55	94.40	9635.26	47.39	-4.33	-425.34	425.37	269.42	0.91	SingleShot	0
106	9770.60	9.11	255.76	94.20	9728.37	47.23	-6.22	-439.46	439.51	269.19	2.34	SingleShot	0
107	9864.70	9.45	252.94	94.10	9821.24	44.94	-10.32	-454.07	454.18	268.70	0.60	SingleShot	0
108	9959.00	10.14	249.30	94.30	9914.16	41.61	-15.53	-469.23	469.49	268.10	0.98	SingleShot	0
109	10053.40	9.55	252.78	94.40	10007.17	38.25	-20.78	-484.49	484.93	267.54	0.89	SingleShot	0
110	10147.70	9.06	266.31	94.30	10100.24	37.28	-23.58	-499.37	499.93	267.30	1.37	SingleShot	0
111	10242.40	7.95	270.86	94.70	10199.90	38.61	-23.96	-513.36	513.92	267.33	2.37	SingleShot	0
112	10336.70	5.93	271.90	94.30	10287.51	40.25	-23.70	-524.75	525.28	267.41	2.15	SingleShot	0
113	10431.10	4.50	272.59	94.40	10381.51	41.62	-23.37	-533.32	533.84	267.49	1.52	SingleShot	0
114	10525.30	3.51	274.90	94.20	10475.48	42.82	-22.95	-539.89	540.38	267.57	1.06	SingleShot	0
115	10619.60	2.19	275.52	94.30	10569.66	43.81	-22.54	-544.56	545.02	267.63	1.40	SingleShot	0
116	10714.00	0.88	282.14	94.40	10664.03	44.44	-22.21	-547.06	547.51	267.68	1.40	SingleShot	0
117	10808.60	0.57	292.52	94.60	10758.62	44.91	-21.88	-548.21	548.64	267.71	0.35	SingleShot	0
118	10933.00	1.02	279.60	124.40	10883.01	45.76	-21.46	-549.87	550.28	267.77	0.38	SinglePulse	0
119	10972.00	1.02	285.99	39.00	10922.00	45.56	-21.30	-550.54	550.95	267.78	0.29	SinglePulse	0
120	11001.00	2.27	340.18	29.00	10950.99	46.42	-20.69	-550.98	551.37	267.85	6.44	SinglePulse	0
121	11034.00	6.76	1.77	33.00	10983.88	48.98	-18.13	-551.15	551.44	268.12	14.30	SinglePulse	0
122	11066.00	10.69	8.33	32.00	11015.51	53.71	-13.31	-550.66	550.82	268.62	12.67	SinglePulse	0
123	11097.00	15.16	7.83	31.00	11045.71	60.40	-6.45	-549.69	549.73	269.33	14.40	SinglePulse	0
124	11129.00	20.12	5.02	32.00	11076.20	69.83	3.19	-548.64	548.65	270.33	15.72	SinglePulse	0
125	11160.00	24.14	3.11	31.00	11104.91	81.30	14.83	-547.83	548.03	271.55	13.20	SinglePulse	0
126	11192.00	27.34	359.85	32.00	11133.73	95.04	28.72	-547.49	548.24	273.00	10.92	SinglePulse	0
127	11223.00	30.46	359.40	31.00	11160.87	109.92	63.48	-547.59	549.33	274.56	10.09	SinglePulse	0
128	11255.00	32.78	359.70	32.00	11188.12	126.59	40.70	-547.72	551.05	276.30	7.27	SinglePulse	0
129	11286.00	35.97	0.81	31.00	11213.70	143.95	77.98	-547.64	553.16	278.10	10.47	SinglePulse	0
130	11317.00	39.39	1.58	31.00	11238.23	162.70	96.92	-547.24	555.75	280.04	11.16	SinglePulse	0
131	11349.00	43.38	1.52	32.00	11262.23	183.62	118.06	-546.67	559.27	282.19	12.46	SinglePulse	0
132	11380.00	46.71	1.83	31.00	11284.13	205.30	139.99	-546.02	563.68	284.38	10.76	SinglePulse	0
133	11412.00	50.98	1.82	32.00	11305.19	229.11	164.06	-545.26	569.4	286.75	13.34	SinglePulse	0
134	11443.00	55.05	1.85	31.00	11323.84	253.57	188.80	-544.47	576.27	289.13	13.13	SinglePulse	0
135	11475.00	60.06	1.67	32.00	11341.00	280.25	215.79	-543.64	584.9	291.65	15.68	SinglePulse	0
136	11506.00	64.44	2.01	31.00	11355.43	307.36	243.20	-542.76	594.75	294.14	14.16	SinglePulse	0
137	11537.00	68.41	2.11	31.00	11367.82	335.41	271.59	-541.73	606	296.63	12.78	SinglePulse	0
138	11569.00	71.80	1.10	32.00	11378.71	365.16	301.66	-540.89	619.33	299.15	11.03	SinglePulse	0
139	11600.00	75.12	0.34	31.00	11387.54	394.61	331.38	-540.52	634.01	301.51	10.94	SinglePulse	0
140	11632.00	77.60	359.79	32.00	11395.08	425.47	362.47	-540.49	650.78	303.85	7.93	SinglePulse	0
141	11666.00	79.00	359.74	32.00	11401.57	456.58	393.80	-540.62	668.84	306.07	4.38	SinglePulse	0
142	11696.00	80.75	0.16	32.00	11407.20	487.85	425.30	-540.65	687.88	308.19	5.61	SinglePulse	0
143	11727.00	84.07	359.25	31.00	11411.29	518.37	456.03	-540.81	707.41	310.14	11.11	SinglePulse	0
144	11759.00	88.83	358.28	32.00	11413.92	550.14	487.95	-541.49	728.91	312.02	15.18	SinglePulse	0
145	11790.00	92.48	358.10	31.00	11414.29	581.00	518.93	-542.47	750.71	313.73	11.77	SinglePulse	0
146	11822.00	92.65	357.99	32.00	11411.49	612.85	550.88	-543.56	773.9	315.38	0.63	SinglePulse	0
147	11847.00	92.94	358.43	25.00	11410.36	637.72	575.84	-544.34	792.4	316.61	1.80	SinglePulse	1
148	11841.00	91.41	357.40	94.00	11407.12	731.32	669.72	-547.76	865.19	320.72	1.63	SinglePulse	1
149	12036.00	91.23	356.41	95.00	11404.93	826.07	764.55	-552.89	943.52	324.13	1.06	SinglePulse	1
150	12129.00	91.16	356.39	93.00	11402.99	918.89	857.35	-558.73	1023.34	326.91	0.08	SinglePulse	1
151	12225.00	91.20	355.67	96.00	11401.01	1014.74	953.10	-565.37	1108.17	329.32	0.75	SinglePulse	1
152	12319.00	91.30	356.46	94.00	11398.96	1108.58	1046.85	-571.82	1192.84	331.36	0.85	SinglePulse	1
153	12413.00	91.10	357.58	94.00	11396.99	1202.33	1140.70	-576.71	1278.2	333.18	1.21	SinglePulse	1
154	12508.00	91.44	1.48	95.00	11394.89	1296.68	1235.66	-577.49	1363.94	334.95	4.12	SinglePulse	1
155	12602.00	91.66	3.59	94.00	11392.34	1389.35	1329.53	-573.33	1447.88	336.67	2.26	SinglePulse	1
156	12697.00	91.75	2.55	95.00	11389.52	1482.85	1424.35	-568.24	1533.51	338.25	1.10	SinglePulse	1
157	12791.00	91.72	1.66	94.00	11386.67	1575.62	1518.24	-564.79	1619.89	339.59	0.95	SinglePulse	1
158	12885.00	91.68	2.05	94.00	11383.88	1668.47	1612.15	-561.75	1707.22	340.79	0.42	SinglePulse	1
159	12980.00	91.58	1.90	94.00	11381.18	1762.27	1707.05	-558.48	1796.09	341.88	0.19	SinglePulse	1
160	13074.00	91.31	1.54	94.00	11378.81	1855.16	1800.98	-555.66	1884.75	342.85	0.48	SinglePulse	1
161	13168.00	91.34	1.39	94.00	11376.64	1948.11	1894.93	-553.26	1974.04	343.72	0.33	SinglePulse	1
162	13263.00	91.17	1.08	94.00	11374.42	2042.11	1989.88	-551.21	2064.81	344.52	0.16	SinglePulse	1
163	13357.00	91.27	1.15	94.00	11372.27	2135.15	2083.84	-549.38	2155.04	345.23	0.11	SinglePulse	1
164	13452.00	91.20	0.80	95.00	11370.23	2229.22	2178.80	-547.76	2246.6	345.89	0.38	SinglePulse	1
165	13546.00	91.27	0.59	94.00	11368.20	2322.35	2272.77	-546.62	2337.58	346.48	0.24	SinglePulse	1
166	13640.00	91.31	0.37	94.00	11366.08	2415.53	2366.74	-545.84	2428.87	347.01	0.24	SinglePulse	1
167	13735.00	91.20	359.88	95.00	11364.00	2509.78	2461.72	-545.63	2521.46	347.50	0.53	SinglePulse	1
168	13829.00	91.24	359.95	94.00	11362.00	2603.08	2555.70	-545.77	2613.32	347.95	0.09	SinglePulse	1
169	13923.00	91.17	0.30	94.00	11358.14	2790.60	2744.66	-545.41	2798.32	348.76	0.38	SinglePulse	1
170	14018.00	91.10	359.89	95.00	11356.14	2790.60	2744.66	-545.41	2798.32	348.76	0.44	SinglePulse	1
171	14112.00	91.24	359.51	94.00	11356.22	2883.84	2838.64	-545.90	2890.65	349.11	0.43	SinglePulse	1
172	14207.00	91.25	359.61	95.00	11354.16	2978.30	2933.61	-546.63	2984.1	349.44	0.11	SinglePulse	1
173	14301.00	91.21	358.68	94.00	11352.14	3071.74	3027.58	-548.03	3076.78	349.74	0.99	SinglePulse	1
174	14396.00	91.11	358.78	95.00	11350.22	3166.25	3122.54	-550.14	3170.63	350.01	0.15	SinglePulse	1
175	14490.00	91.10	357.93	94.00	11348.41	3259.82	3216.48	-552.83	3263.64	350.25	0.90	SinglePulse	1
176	14585.00	91.07	357.17	95.00	11346.61	3354.31	3311.37	-556.89	3357.88	350.45	0.80	SinglePulse	1
177	14680.00	90.96	356.58	95.00	11344.92	3449.28	3406.22	-562.07	3452.28	350.63	0.63	SinglePulse	1
178	14775.00	91.07	355.23	95.00	11343.24	3544.14	3500.96	-568.85	3546.87	350.77	1.43	SinglePulse	1
179	14870.00	92.03	358.40	95.00	11340.67	3638.88	3595.76	-574.13	3641.31	350.93	3.49	SinglePulse	1
180	14963.00	91.79	0.74	93.00	11337.57	3731.22	3688.65	-574.83	3733.22	351.14	2.53	SinglePulse	1
181	15057.00	91.65	1.18	94.00	11334.75	3824.28	3782.65	-573.25	3825.84	351.38	0.49	SinglePulse	1
182	15153.00	91.14	2.98	96.00	11332.41	3919.05	3878.55	-569.77	3920.18	351.64	1.95	SinglePulse	1
183	15248.00	91.20	3.64	95.00	11328.48	4015.82	4066.18	-558.63	4013.24	351.92	0.70	SinglePulse	1
184	15343.00	91.21	3.19	95.00	11326.48	4200.45	4164.03	-553.66	4200.68	352.43	0.46	SinglePulse	1
185	15439.00	91.24	2.75	96.00	11326.42	4200.45	4164.03	-553.66	4200.68	352.43	0.46	SinglePulse	1
186	15534.00	91.34	0.88	95.00	11324.28	4294.31	4258.96	-550.65	4294.4	352.63	1.97	SinglePulse	1
187	15630.00	91.27	358.42	96.00	11322.10	4389.63	4354.94	-551.23	4389.67	352.79	2.56	SinglePulse	1
188	15725.00	91.17	356.57	95.00	113								